

EARLY STAGES OF TWO JAMAICA NYMPHALIDAE.

BY T. D. A. COCKERELL.

AGANISTHOS ORION. Egg laid on under side of leaf of trumpet tree, subglobose (*not* barrel-shaped or conoid) with 18 strong ribs each of which bears a row of minute but well developed spines which are more or less bulbous at tips; color of shell bluish white.

Young larvae, brought by Mrs. Swainson March, 1892, presumed to be this species. Length about 6 mm. Head white subtranslucent, shiny. Body yellowish white (the eighth segment above decidedly yellow) with very long hairs, which arise from prominent tubercles; these hairs are all minutely but distinctly bristly (or barbed?), the bristles (barbs) mostly alternate but toward tip of hair alternate; about eight or nine hairs arise from each tubercle, the central one larger, more bristly and black. The thoracic legs have two claws.

Older larva from Mrs. Swainson, Bath, Nov. 3. About 49 mm. long, 8 mm. broad, cylindrical. Head heart-shaped, broadly notched above pale brownish with a thick black cross in middle of face cutting the ground color into four portions; cheeks black

with numerous short rather pale spines, and a thick black projection, 2 mm. long, blunt and shiny on each side of the crown, each with 5 spinules. Body beneath and abdominal legs red-brown; above dark red brown, the thoracic legs, thoracic and anal plates black; numerous bright apple green transverse bands above, four to each of the middle segments variously broken and coalesced on the others; they alternate with equally broad bands of the ground color so that it might equally well be described as green above transversely banded with brown. There is a narrow mid-dorsal green band, and on the middle segments two green spots in front of each spiracle; also a minute green point and a black patch in the subdorsal region. The spines branch at their summits and are not centrally produced beyond, the radiate branches being longer than the spines. The spines are pale yellow but the branches of the dorsal spine are black. The following table, in which the arabic numerals indicate the number of branches of each spine, will show their general disposition:—

Body Segments	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Dorsal				4	4	4	4	4	4	4	4	6
Subdorsal	2	5	4		2							
Lateral	1 1	2 2	1 1	4 4	4 4	4 4	4 4	4 4	4 4	3 4	4	2 4-5
	1 1	1 1	1 1	2 1 2	1 2	1 2	1 2	1 2	1 2	1 1 1 2		

GYNAECIA DIRCE. Larva about 30 mm. long. Head shiny black, with five or six short white spines on each side, and at each

upper external margin a long slender spine, broader and truncate at tip, whitish with brown end and beset with scattered

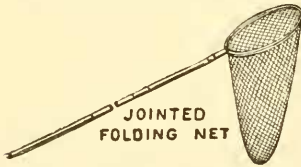
short spinules. Body including legs velvety black, but there is a pale yellow patch on each side of each segment except the 2d, 4th and last; these patches are situated near the anterior border of the segments and are largest on 7th-10th. The first body segment bears dorsally two white pointed spines of moderate length; the other segments bear spines stellate at their summits,

though the spine itself is continued beyond the branching so as to look like an upright ray, being but little larger than the divergent spines; the thicker basal part of the spine is again a little longer than the produced terminal portion. Their disposition is shown in the following table, in which the figures indicate the number of divergent lateral radii:—

Body Segments	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Dorsal		5	5-6	4	4	4	4	4	4-5	5	5-6	6-7
Subdorsal			6-5-3	4	4	4	4	4	4	4	4	
Lateral				4	4	4	4	4	4	4	4	
		White			Yellow.						White.	

A younger larva about 21 mm. long is like the adult, except that the long spines on the head are altogether blackish and all the body spines are yellow.

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